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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/629,908  | 07/30/2003  | Keiko Tazaki         | DAIN:743            | 6084             |
| 25944   | 7590        | 08/17/2006           | EXAMINER            |                  |
| OLIFF & BERRIDGE, PLC<br>P.O. BOX 19928<br>ALEXANDRIA, VA 22320 |             |                      | DUDEK, JAMES A      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2871                |                  |

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/629,908

**Applicant(s)**

TAZAKI ET AL.

**Examiner**

James A. Dudek

**Art Unit**

2871

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-30 is/are pending in the application.
- 4a) Of the above claim(s) 25-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-15, 18-21 and 24 is/are rejected.
- 7) ☒ Claim(s) 16, 17, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION*****Election/Restrictions***

Newly submitted claims 25-30 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: these claims are associated with a new mutually exclusive species.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25-30 are been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 13, 15, 18, 19, 21 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6853423 B2 (423).**

Per claims 13 and 19, 423 teaches an optical element comprising: a liquid crystal layer [discotic layer B and A as shown in figures 1, 4 and 5] made by forming and curing a film of a liquid crystalline material, the liquid crystal layer including a liquid crystal phase in a solidified

Art Unit: 2871

state such that a molecular orientation of the liquid crystal phase is maintained even when an electrical force is applied [the discotic liquid crystal is a laminate, see column 13] and a protective layer formed on the liquid crystal layer [the substrate of the cell described at column 27], said protective layer having hardness high enough to prevent the liquid crystal layer from being deformed by externally exerted forces wherein the optical element [inherent to the materials used] further comprises a color filter layer of a light absorption type disposed between the liquid crystal layer and the protective layer [the color filter layer is between the substrate and polarizing film which includes layer A]. Regarding claim 19, the support layer is the protecting layer. 423 does not explicitly teach glass or polycarbonate substrate and an absorbing color filter. However these are well known for improved protection and simplified manufacturing, respectively. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention.*

Per claims 15 and 21, polycarbonate is a resin and is made from a monomer.

Per claims 18 and 24, 764 teaches the optical element according to claim 1, further comprising an alignment substrate that supports the liquid crystal layer, said alignment layer being disposed on the liquid crystal layer opposite to a surface of the protective layer [see orientation layer O].

**Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over 423 in view of 20040048950 (950).**

764 teaches the optical element according to claim 1, but lacks the resin protective layer having a modulus of elasticity ( $=(\text{elastic deformation})/(\text{total deformation})$ ) of 0.6 or more as determined by pushing an indenter into the protective layer with a test force of 2 mN in accordance with the universal hardness test method. However 950 teaches a resin protective layer having the claimed characteristics to avoid adverse effects to color properties. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the protective layer of 950 with 764.

***Allowable Subject Matter***

**Claims 16-17 and 22-23 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

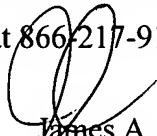
***Response to Arguments***

Applicant's arguments with respect to claims 13-24 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James A. Dudek  
Primary Examiner  
Art Unit 2871